

Impact of subscription and discount cards on mobility decision-making: the example of BahnCard in the NRW tariff

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Agenda

A. BahnCard: Two value perspectives

B. NRW tariff and BahnCard

C. Special features of the survey design

D. Selected results

E. Look beyond the box

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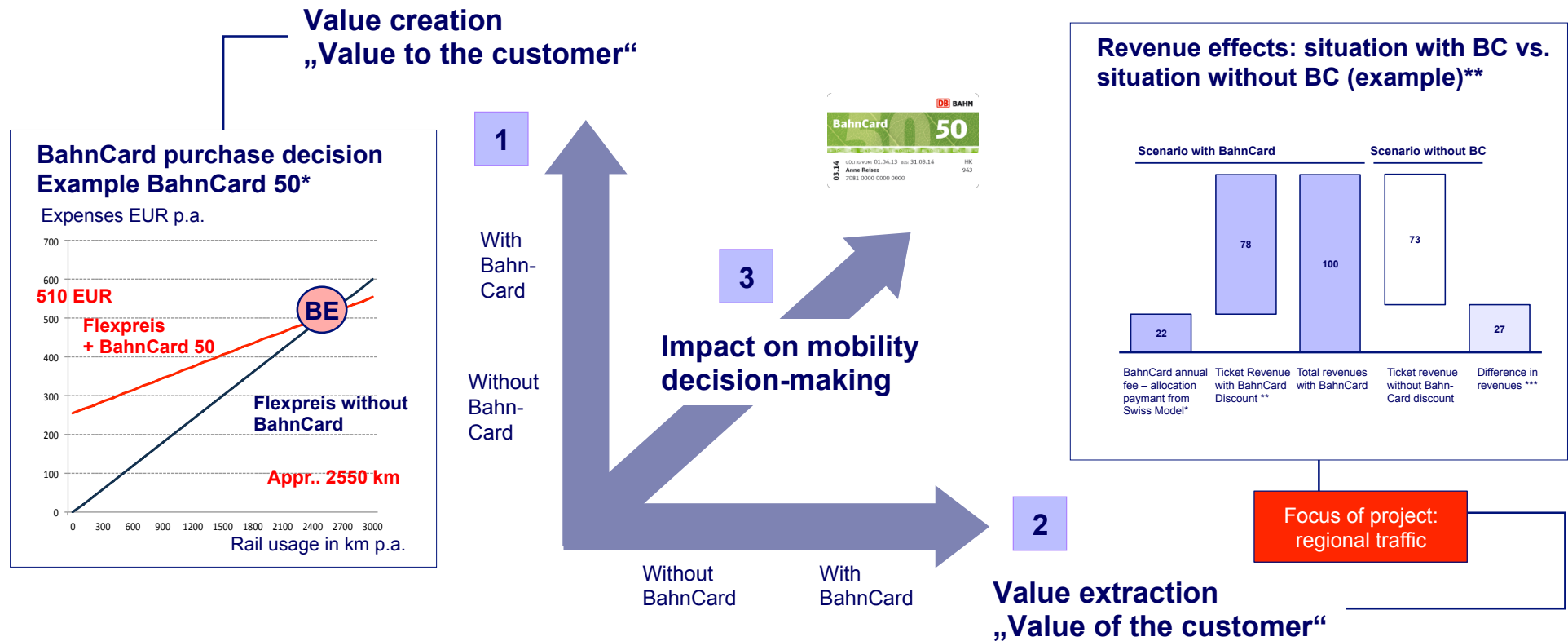
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Combining two value perspectives: "Value to the customer" and "Value of the customer"

BahnCard (BC): the perspective of the traveler and the perspective of the company



* Price of the card (not reduced, 255 EUR p.a., 2nd class, price in 2019), assuming average price of 20 cents per km („Flexpreis“, full flex ticket)

** Consideration of revenue effects only; costs must be taken into account additionally

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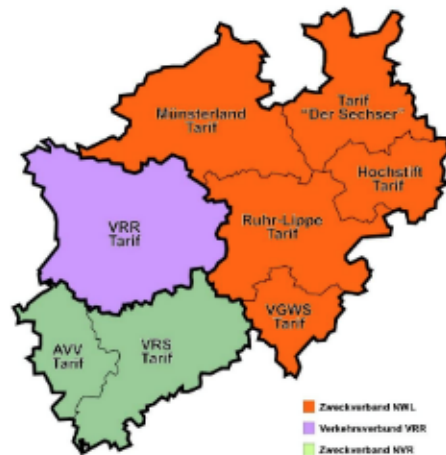
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NRW tariff – data from 2017

- NRW tariff account for appr. 2% of all trips with regional busses and trains (37.6 million journeys, € 175 million p.a., 2017).
- appr. 1 million trips with BahnCard



Bahncard

- Introduced in 1992 (BahnCard 50); volume appr. 3 million
- Expanded portfolio in 2003 (BahnCard 25, BahnCard 50, BahnCard 100)
- Total volume (2019): 5.3 million

BahnCard 25: Ab 62 Euro für Gelegenheitsfahrer

Preise:
 BahnCard 25, 1. Klasse: 125 Euro
 BahnCard 25, 2. Klasse: 62 Euro

Ihre Vorteile:

- ✓ 75 % Rabatt auf die Super Spar-, Spar- und Flexpreise der Deutschen Bahn innerhalb Deutschlands für 1 Jahr
- ✓ Ermäßigte Parktickets erhältlich



- › Konditionen
- › Weitere Vorteile mit der BahnCard


 5 Mio. Kunden profitieren von der BahnCard

Focus of project:
regional traffic

Key challenge for the survey: extremely low incidence of target segment

Specific framework and challenges for the survey

Framework

- In 2017, the demand for buses and trains in NRW (according to local transport authorities) amounted to approx. 2.1 billion trips.
- Trips are split into 2 segments: a. trips within transport associations and b. cross-border journeys. The latter account for 38 million trips (NRW tariff).
- Within the NRW tariff, 3.2 million trips are related to relational tickets, only these can be discounted by BahnCard.
- Approximately 1.1 million journeys are discounted in the NRW tariff by the BahnCard 25/50.
- Low probability to find customers with a ticket in the NRW tariff and BahnCard discount of approximately 0.04% (1 out of 2,500 travellers on train).

Challenge



"The needle in a haystack"

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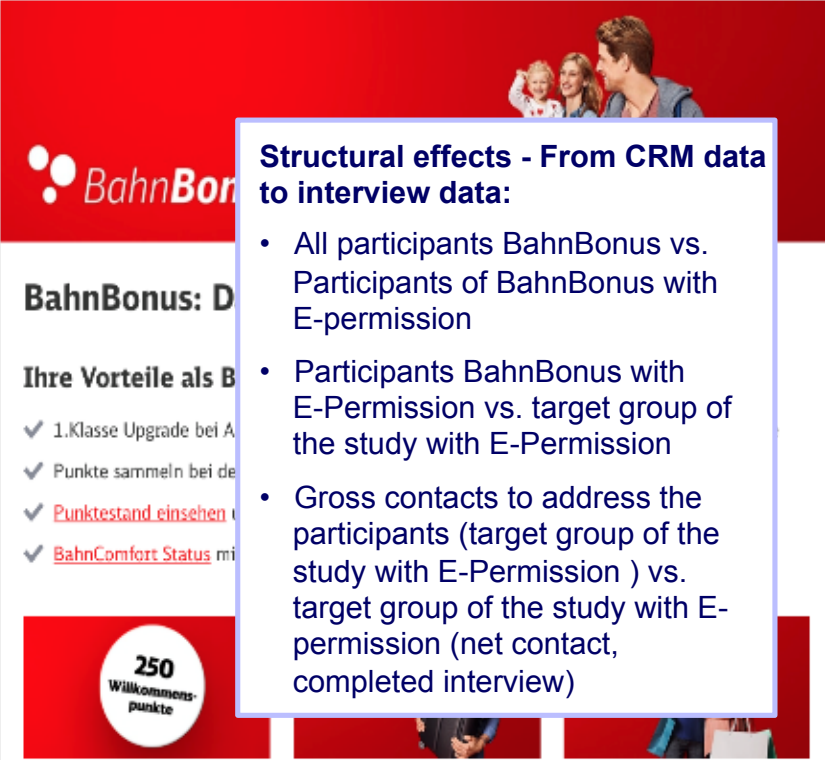
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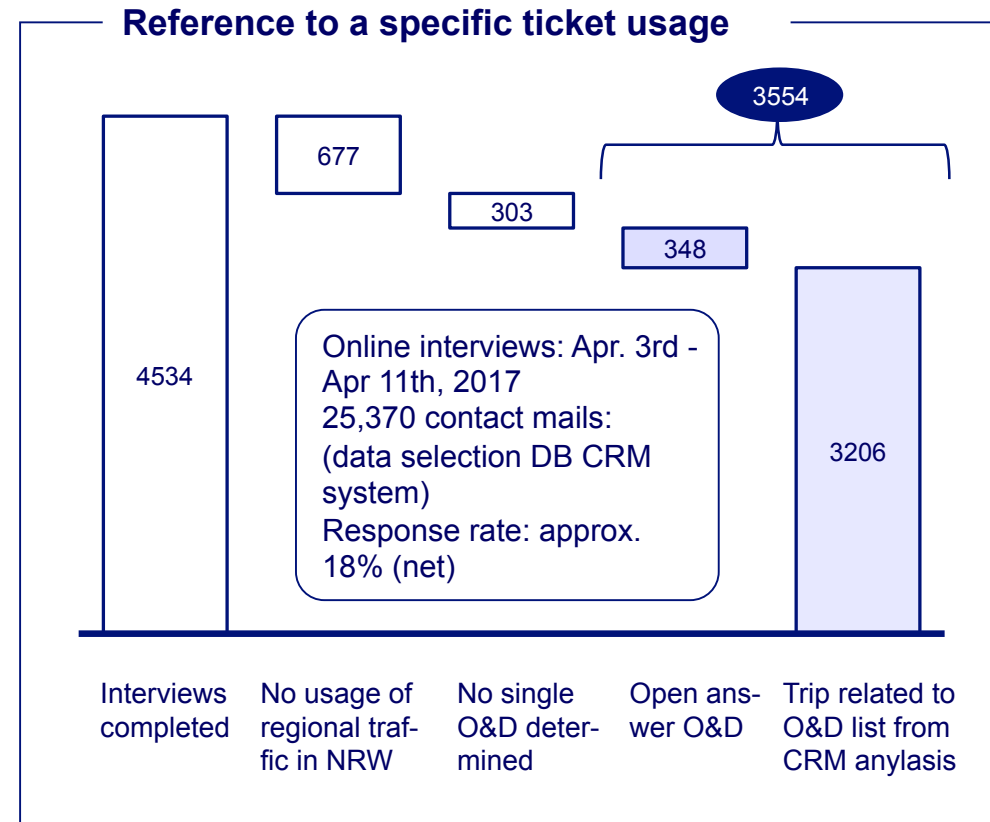
Key element of the project was an online survey conducted in April 2017: n=3.554 respondents were qualified as core interviews

Data management for the study (survey): what kind of information is provided?



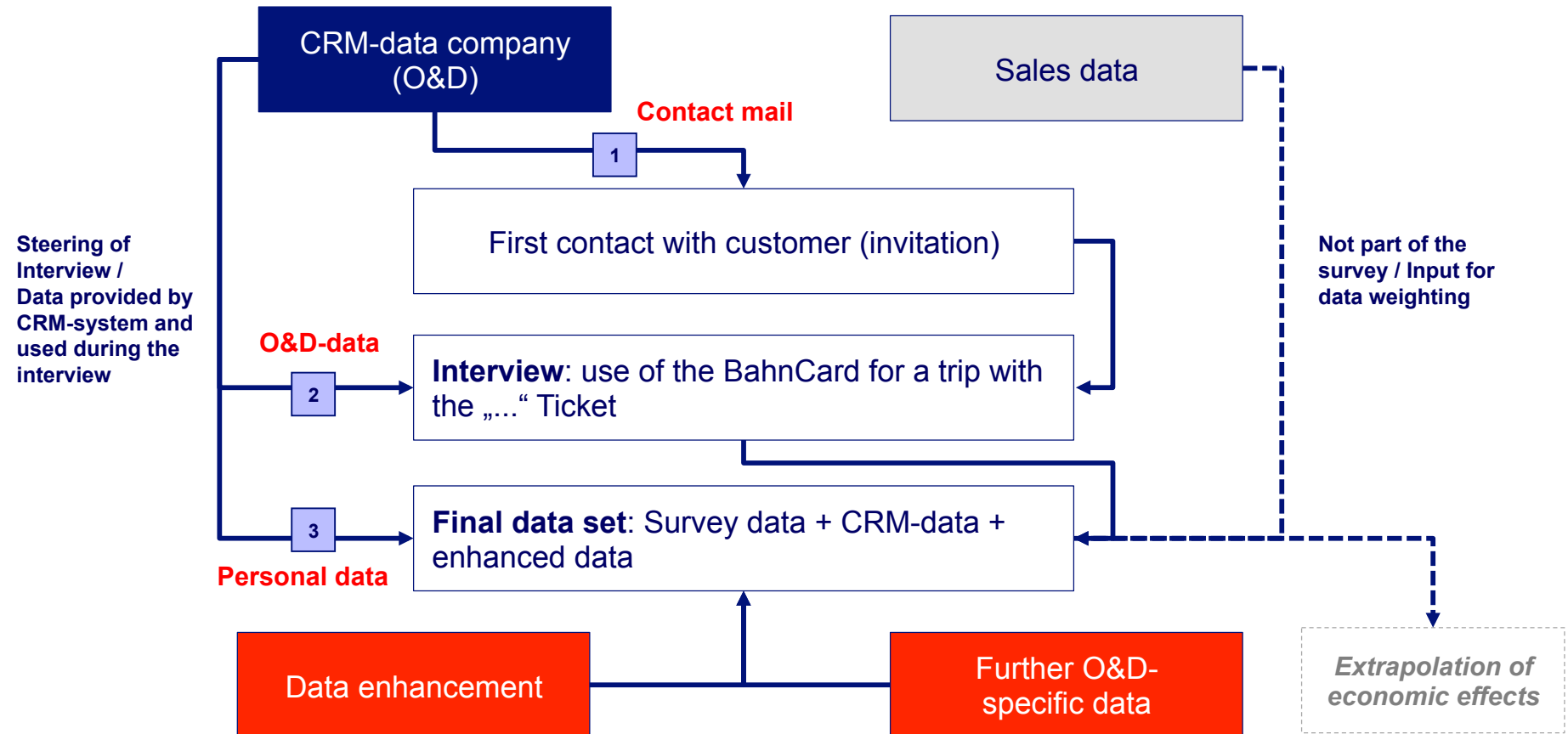
Structural effects - From CRM data to interview data:

- All participants BahnBonus vs. Participants of BahnBonus with E-permission
- Participants BahnBonus with E-Permission vs. target group of the study with E-Permission
- Gross contacts to address the participants (target group of the study with E-Permission) vs. target group of the study with E-permission (net contact, completed interview)



In addition to the original survey data, the final data set also contains information provided by the CRM-system and enriched data

Data management for the study (survey): what kind of information is provided?



Key point in the interview: The respondent identifies a specific route for the earlier use of the ticket

Use of CRM data when determining the reference trip for the survey

Cutout online interview: reference trip

The screenshot shows a survey question from DB. At the top left is the DB logo. Below it, it says '19% beantwortet'. The question text is: 'Wir stellen Ihnen jetzt unterschiedliche Strecken vor, auf der Sie die Bahn nutzen können. Welche der folgenden Strecken haben Sie in den letzten 12 Monaten für eine Bahnfahrt mit dem Nah-/Regionalverkehr (nicht ICE/IC/EC) genutzt und dabei einen BahnCard-Rabatt erhalten?'. Below the question, it says 'Mehrere Antworten sind möglich.'. There are five checkbox options: 'Von Bremen nach Lüneburg (oder in der Gegenrichtung)', 'Von Bonn nach Moers (oder in der Gegenrichtung)', 'Von München nach Augsburg (oder in der Gegenrichtung)', 'Von Leipzig nach Halle (oder in der Gegenrichtung)', and 'Von Hamburg nach Lübeck (oder in der Gegenrichtung)'. There is also a radio button option 'Weiß nicht'. At the bottom are 'Zurück' and 'Weiter' buttons. Two callout boxes are present: one on the left pointing to the second option, stating 'The O&D actually used by the participant is displayed in position 2'; one on the right pointing to the first, third, fourth, and fifth options, stating 'O&D offered (positions 1, 3, 4 and 5) are not relevant for the interview'.

DB

19% beantwortet

Wir stellen Ihnen jetzt unterschiedliche Strecken vor, auf der Sie die Bahn nutzen können. Welche der folgenden Strecken haben Sie in den letzten 12 Monaten für eine Bahnfahrt mit dem Nah-/Regionalverkehr (nicht ICE/IC/EC) genutzt und dabei einen BahnCard-Rabatt erhalten?

Mehrere Antworten sind möglich.

Von Bremen nach Lüneburg (oder in der Gegenrichtung)

Von Bonn nach Moers (oder in der Gegenrichtung)

Von München nach Augsburg (oder in der Gegenrichtung)

Von Leipzig nach Halle (oder in der Gegenrichtung)

Von Hamburg nach Lübeck (oder in der Gegenrichtung)

Weiß nicht

Zurück Weiter

The O&D actually used by the participant is displayed in position 2

O&D offered (positions 1, 3, 4 and 5) are not relevant for the interview

In 99% of the cases, the information provided by the CRM system is consistent with the BahnCard indicated during the interview

Comparison of stated current BahnCard ownership (interview) with BahnCard ownership in the CRM system¹⁾

		BahnCard ownership according to CRM-System (time of data selection)			
		BahnCard 25	BahnCard 50	BahnCard 100	Total
BahnCard (actual usage, as indicated by respondents during the interview)	BahnCard 25	35,4%	0,2%	0,0%	35,6%
	BahnCard 50	0,8%	62,0%	0,1%	62,9%
	BahnCard 100	0,0%	0,2%	1,2%	1,4%
	Total	36,2%	62,4%	1,4%	100,0%

Diagonal cases: 98.6% (identical cards)

1) Do you currently own a BahnCard?

Source: **exeo** Strategic Consulting AG

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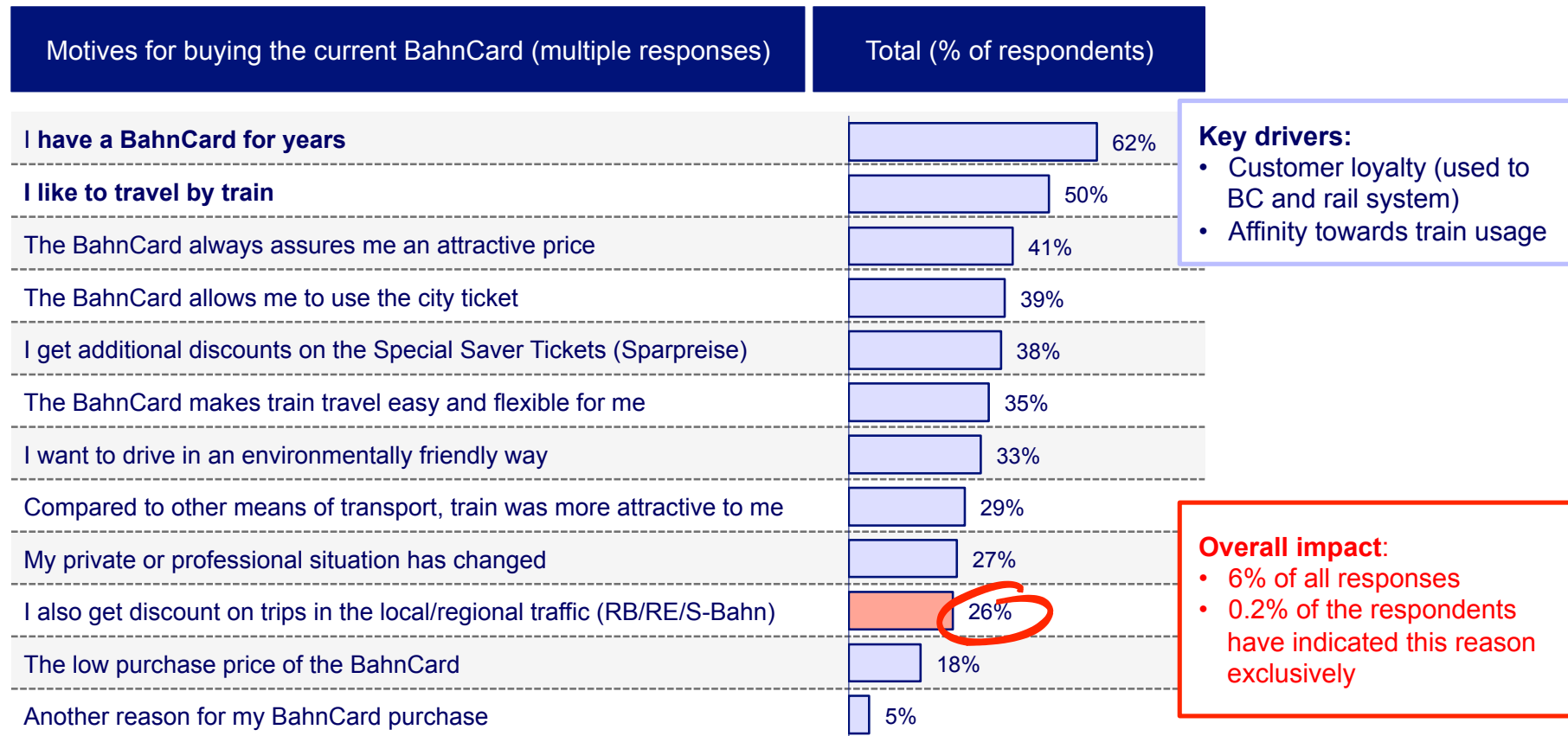
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Discounts concerning tickets for local/regional traffic do not play a crucial role for the BahnCard purchase decision

BahnCard (BC): main reasons to purchase the actual BahnCard¹⁾



1) What were the main reasons why you bought your current BahnCard?

Source: KCM

Only a relatively small proportion of BahnCard customers can not reach break-even

BahnCard owners: Train usage for regional and long-haul traffic¹⁾

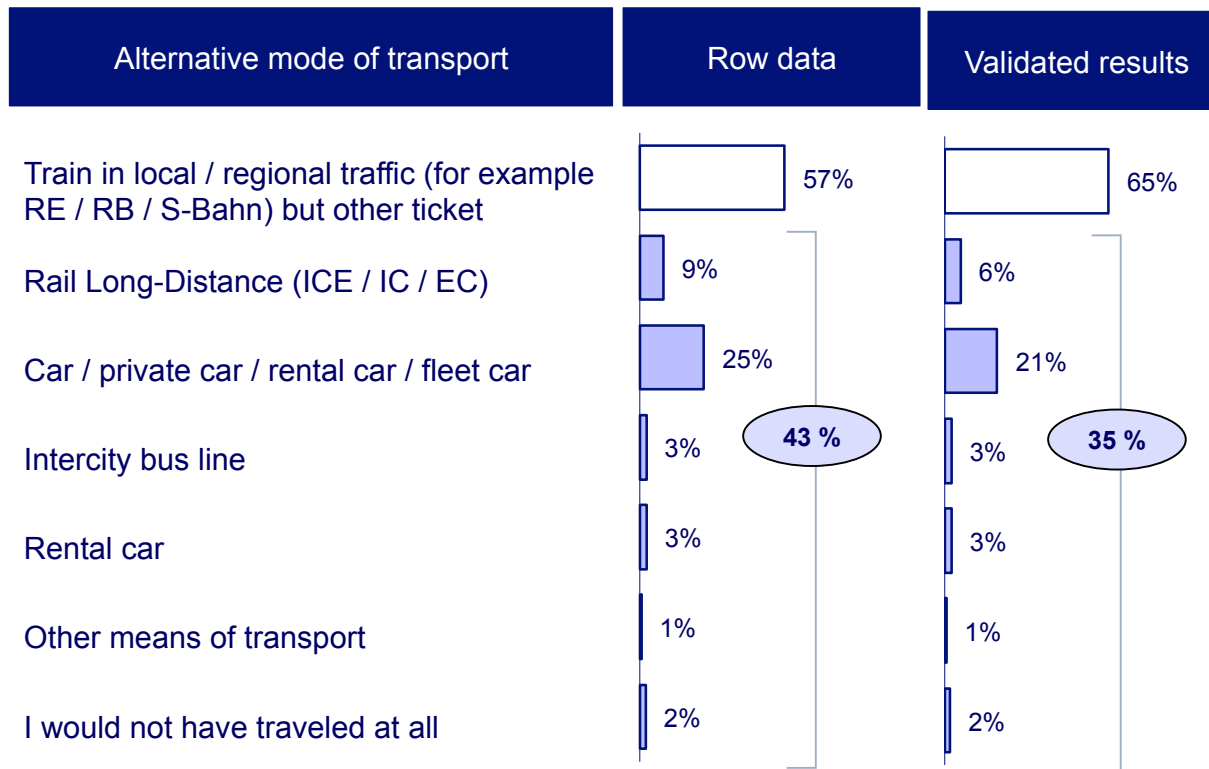
		Long-distance trips by train (trips per year)				Total
		No train use	1 -3 times	4-12 times	13+ times	
Regional busses and trains (trips per year)	25 + (mind. 2 / month)	0,7%	1,1%	5,0%	17,8%	24,7%
	13-24 mal (1 - 2 time / month)	0,4%	1,1%	6,5%	9,9%	17,8%
	4-12 times	0,8%	3,8%	16,3%	13,7%	34,6%
	1-3 times	0,5%	3,9%	8,5%	6,5%	19,4%
	I don't know	0,1%	0,5%	1,0%	1,8%	3,5%
	Total	2,4%	10,5%	37,3%	49,7%	100,0%


1) How often do you use the trains in local and regional transport (RE / RB / S-Bahn) in your state and receive a discount with your BahnCard? Please also refer to your details on the last 12 months: Now we are interested in your travel behavior within Germany. How many trips over 100 km of single distance (= one way) have you made within Germany in the last 12 months using the following means of transport?

Source: KCM

Additional demand due to BahnCard ownership accounts for 35 % of all trips by train (NRW tariff)

Procedure for validating additional demand effects due to BahnCard ownership [%]¹⁾



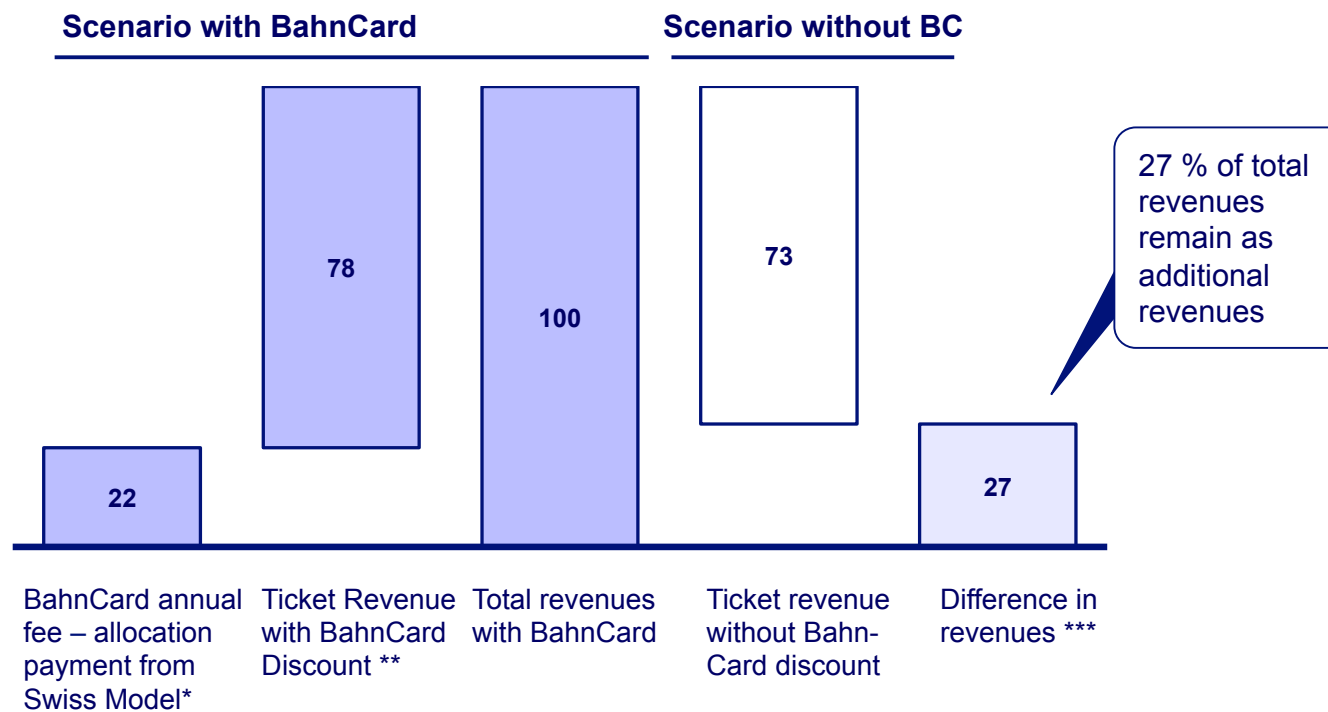
Validation procedure 

- Validation Step 1: Weighting takes into account higher additional rates in online vs. online surveys (factor 0.85), thus general attenuation in the data set.²⁾
- Validation step 2: Content validation: The cannibalization will be assigned to:
 - Respondents indicating they would have used the car as an alternative but do not have a car available.
 - Persons who indicate alternatively to use the railway in long-distance traffic, but no adequate offer exists.

1) How would you have actually acted in your reported journey if you had not owned a BahnCard?
 2) Use of secondary information (studies with offline online split).

Discounting tickets for BahnCard customers results in positive revenue effects for local and regional transport companies

Overall perspective: Revenue effect of BahnCard Ticket discounts in the NRW tariff (Total revenues =100)



* Compensation rate for loss of revenues: 39,29 % of discount volume (2016); ** Based on sales statistic 2016; *** Only direct effects are considered.

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The most important results at a glance and a look beyond the box

Key findings – project goals

A

- Discounts concerning tickets for local/regional traffic do not play a crucial role for the BahnCard purchase decision
- Additional demand due to BahnCard ownership accounts for 35 % of all trips by train (NRW tariff)
- Discounting tickets for BahnCard customers leads to positive revenue effects for local and regional transport companies

Further aspects – look beyond the box

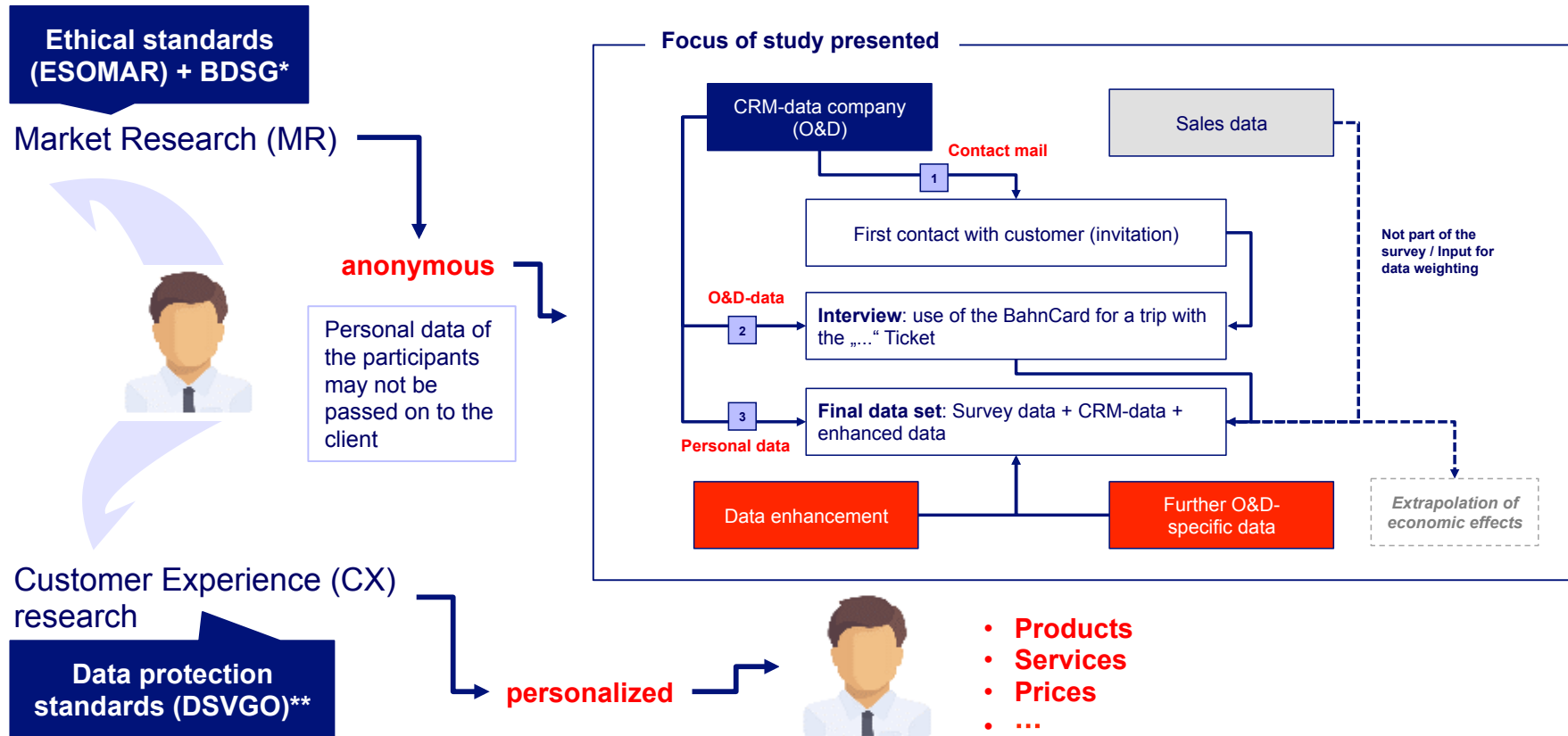
B

- Subscriptions as one of the leading price models in eCommerce; New mobility offers as cluno.de (cars, Germany) or fair.com (U.S.) with disruptive potential
- Better understanding of consumer decisions towards subscriptions is key (BahnCard and Amazon Prime as famous examples)
- There are doubts that the impact of BahnCard on decision-making can be explained by the sunk cost effect

CRM-data-driven Market Research (MR) vs. Customer Experience (CX) research: There is a big difference

Back-up

The small but subtle difference between Market Research (MR) and Customer Experience (CX) research



* Germany: According to the BDSG market research based on a consent (§ 4a BDSG) or according to § 30a BDSG is permitted. The contact required an E-Permission. Participation in the survey was voluntary

** Datenschutzgrundverordnung; General Data Protection Regulation (GDPR).

Source: **exeo** Strategic Consulting AG; Krämer (2017)

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